

Enhanced Absorption of Nutrients and Water via Induced Villi Dilation

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Introduction

When storage space and cargo transport capacity is limited, every square foot of space is valuable to the warfighter. Space used on cargo aircraft for transporting food rations could be used for transporting munitions.

At the tactical level, troops must carry their own food and water. Again, there is a trade-off between carrying water and carrying other supplies. The less water and food must be carried externally, the more munitions and other supplies may be carried. As dehydration and malabsorption are common problems under battlefield conditions (particularly due to the dehydrated nature of MRE rations,) anything which could enhance absorption of both food and water would provide an advantage to the warfighter.

Abstract

By administering a villi-dilating hormone to the warfighter five minutes before the ingestion of food or water, the percentage of both macro- and micro-nutrients which may be absorbed from ingested food may be enhanced. These hormones may be administered in the form of a pill which would consume a trivial amount of space but which would have the effect of saving a great deal of space and reducing the load which must be carried by an individual warfighter.

Advanced cases of dehydration which would ordinarily require intravenous hydration may be addressed with the aid of such a supplement, which could re-activate villi which are malfunctioning due to advanced dehydration.

Conclusion

If established as safe, villi-dilating pills could become general-issue and may enhance the overall efficiency of military operations.